USER'S GUIDE

RV-3798

AUDIO/VIDEO RECEIVER

SAFETY INFORMATION

Refer to the identification/rating label located on the back panel of your product for its proper operating voltage.

FCC Regulations state that unauthorized changes or modifications to this equipment may void the user's authority to operate it.

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a unit of GM Hughes Electronics.

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FIRST THINGS FIRST

HI, MY NAME IS KIM ...

...and I wrote this user manual along with the help of the engineers, designers and product managers. We worked hard to make sure that you have a rewarding experience using this RCA A/V receiver.

READ THE FIRST FOUR CHAPTERS

The first section of this owner's manual shows you how to use your audio receiver for the first time. The next three sections tell you about using the receiver's controls and programming the remote. Use the last sections of the manual to connect your receiver to other components and as a general reference. If you have a specific question, refer to the table of contents or the index.

PLEASE READ THE NOTES IN THE TEXT

The engineers and designers gave me some great tips about this audio/video receiver. When a tip applies to the information on a page, I included it in a note box at the bottom of the page.

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2 OPERATING THE RECEIVER

3 TOUR OF THE RECEIVER

4 PROGRAMMING THE REMOTE

READ ME...

Note boxes like this one contain helpful and interesting information about using your audio receiver.

FIRST THINGS FIRST

STEP 1: UNPACK THE RECEIVER

Unpack the receiver and the accessories. The accessories packed with the receiver include the remote (CRK67G1), four AAA batteries, an AM loop antenna, an FM wire antenna, and Important Safeguards.

STEP 2: CONNECT THE RECEIVER

Before you plug in and turn on your audio/video receiver, connect the receiver to the components in your system and connect the speakers.

The next section shows how to connect the receiver to a TV only. If you are going to connect the receiver to a TV and VCR, laserdisc player or other component, see *Appendix A: Connecting the Receiver*. (Page 37)

For information on connecting your speakers, see *Appendix A: Connecting the Receiver*. For three suggestions on placing your speakers for the best sound, see *Appendix B: Speaker Placement*. (Page 47.)

TV ONLY

Do **not** plug your TV or VCR into the "switched" outlet on the back of the receiver.

You will need:

(1) paired (red/white) stereo cable

(1) single (yellow) video cable

           or

(1) stereo A/V cable

(1) coaxial cable.

Connect the cables as shown to the right.

4
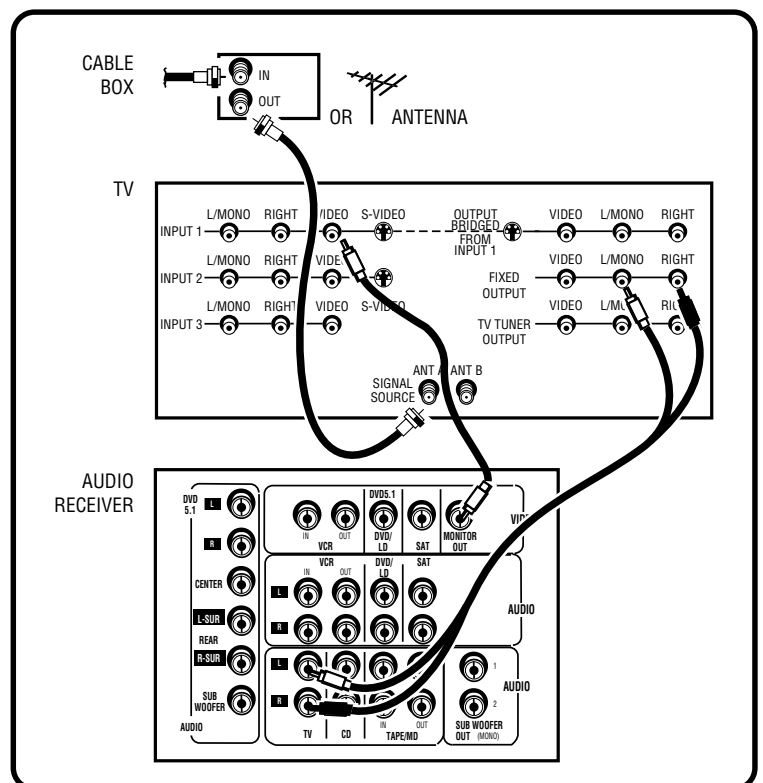
FIRST THINGS FIRST

STEP 3: PUT BATTERIES IN THE REMOTE

1. Slide the battery compartment cover off the back of the remote.

2. Insert the four AAA batteries, matching the + and − ends of each battery with the symbols in the compartment.

3. Replace the cover.
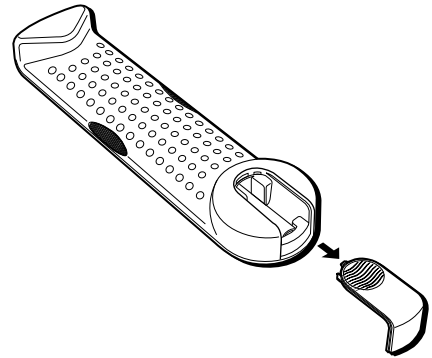
STEP 4: PLUG IN THE RECEIVER

Before you plug in the receiver, connect the other components and speakers.

Plug the power cord into the wall outlet, matching the wide blade of the plug with the wide slot in the outlet. Be sure to insert the plug completely.
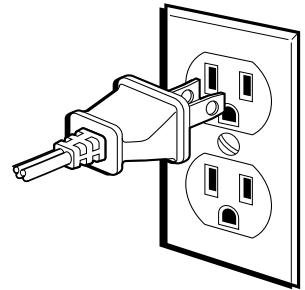
STEP 5: TURN ON THE RECEIVER

Press the POWER button on the receiver or any device button on the remote.

Read on...

The next section tells you how to operate the receiver. Then, read the section that takes you on a tour of the receiver and remote control.

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OPERATING THE RECEIVER

IF YOU HAVE QUESTIONS ...

 ...about the front panel or remote control buttons as you go through this section, refer to *Chapter 3, Tour of the Receiver*.

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> **Important:**
>
> **In order to safeguard your hearing, turn the volume down before turning on your receiver.**
>
> **Unless otherwise specified, the buttons mentioned in this chapter are on the remote control.**

OPERATING THE RECEIVER

TUNING THE RECEIVER USING THE REMOTE

1. Press AM•FM to activate the tuner.

2. Press AM•FM again to select the AM or FM band.

TUNING

Press FWD to move up the AM or FM band.

Press REV to move down the AM or FM band.

AUTO TUNING

Use the SEEK feature to automatically search for stations of sufficient strength.

Press INPUT•SEEK. "SEARCH" appears in the display. Beginning at its current frequency, the tuner finds and stops on the next station whose frequency is strong enough to be received. To continue the search, press INPUT•SEEK again.

STORING STATIONS IN MEMORY

You can store up to 30 AM and FM stations. These stations can be stored in random order. Use the convenient Preset Stations List in this guide to note the name and location of the stations you have stored.

To Store a Station

1. Press AM•FM to turn on the receiver.

2. Select the band—AM or FM.

3. Select the station you want to store in memory using the methods described above.

4. Press MENU/SELECT . "MEMORY" appears in the display. While "MEMORY" is visible, press number buttons on the remote for the station.

   For stations 1, 2 or 3 press 0, then press 1, 2, or 3. For stations 4 through 30, press the numbers directly.

If the Memory indicator on the display turns off before you preset your station selection, press MENU/SELECT again.

If the receiver is disconnected from its power source, the preset stations are maintained in memory for up to 7 days.

To Play a Preset Station

Press the appropriate Preset Stations number. For stations 1, 2 or 3 press 0, then press 1, 2, or 3. For stations 4 through 30, press the numbers directly.

Or, press CH **+** to tune to the next preset station or CH – to tune to the previous preset station.

PRESET SCANNING

Use P.SCAN (Preset Scan) on the receiver's front panel to review the preset stations stored in the tuner's memory.

Press P.SCAN. "PRESET" and the station's location in memory appear in the display. The tuner automatically scans all preset stations in order, pausing at each one for approximately 4 seconds.

When the tuner reaches the station you want, press P.SCAN to stop the scanning. If the scan is not interrupted, the tuner reviews all preset stations in order, stopping at the point where the scan began.

BALANCING THE SPEAKER SYSTEM

To reproduce sound effects as they were intended, the speakers must be correctly balanced.

To balance the speakers using the test tone, all speakers must be connected to your receiver. Your receiver must be in the Dolby® Pro Logic Surround, Dolby 3 Stereo or Hall Mode.

TO BALANCE THE SPEAKERS

1. Press TEST on the receiver's front panel. The receiver generates "pink noise" and applies it at 2-second intervals to the left main, center, right main, and left and right rear channels (simultaneously), in that order.

2. Make adjustments by pressing REAR•CENTER. Press + or − on your remote control (LEVEL up or down on the receiver) to adjust the balance for each channel. Each time you press these buttons, the receiver provides you with 4 more seconds of pink noise to that channel before moving on to the next. The adjustments will be indicated on the receiver's display as they are made. Follow the sequence below to make adjustments:

   1. Press REAR•CENTER once and adjust the left main channel.
   2. Press REAR•CENTER again and adjust the center main channel.
   3. Press REAR•CENTER again and adjust the left rear channel.
   4. Press REAR•CENTER two more times and adjust the right rear channel (the center main channel must be passed through to adjust the right rear channel).
   5. Press REAR•CENTER again to adjust the right main channel.
   6. Press TEST again to end the test.

3. You will make two passes at adjusting your speakers. In the first pass, adjust the bars on the Test Tone screen of your TV to equal levels. In the second pass, stand at the spot in the room where you are most likely to listen to your system (the rear speakers' sound should be coming from behind your head). Adjust all of the speaker outputs to "sound" equal from your position.

You may not need to check or adjust these levels again unless you move your system, rearrange the speakers, or change your preferred seating location in the room.

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```
┌─────────────────────────────┐
│        TEST TONE            │
│   LEFT                      │
│   CENTER                    │
│   RIGHT                     │
│           ▷      0      ◁    │
│   R REAR                    │
│  ▷L REAR  |||||             │
└─────────────────────────────┘
```
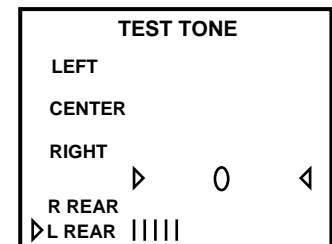
Fine tuning is best performed with the remote control so that adjustments can be made from the viewing or listening area.

USING SWAP AUDIO

Swap audio lets you change the sound from the large picture to the small picture when you are watching TV and using picture-in-picture (PIP) with an external video source.

TO USE SWAP AUDIO

When you are watching TV and turn on PIP, you can turn on another video source and swap the sound from the large picture coming from the TV to the small picture coming from the other video source.

1. Press TV on the remote to turn on the TV and put the receiver in TV mode.

2. Press the PIP button. PIP flashes for 4 seconds on the receiver's front panel. The empty PIP appears on the screen.

3. Activate a video source for the PIP. The picture from the video source appears in the PIP.

4. Press TV.

5. Change to the TV channel you want to watch on the large screen.

6. Press SWAP AUDIO to swap the sound between the large picture and the small picture.

7. To swap the video between the large picture and the small picture, use the SWAP PIP button on the remote.

If you swap the TV picture to the PIP and the other video source to the large picture, you may not be able to swap the audio.

TO CHANGE THE VIDEO SOURCE AND SWAP THE AUDIO

If you want to change the video source for the PIP and want to be able to use SWAP AUDIO:

1. Turn off PIP.

2. Change the video source to another video component connected to the receiver.

3. Press TV to watch the TV.

4. Press PIP. The video source appears in the PIP. The video from the TV appears in the large picture.

5. Press SWAP AUDIO to swap the audio as you want.

The Swap Audio feature may not work with all TV brands with the PIP feature.

If your TV has a PIP feature, see the TV's user's guide for instructions for using it.

TOUR OF THE RECEIVER

BUTTONS AND CONNECTIONS

This section describes the receiver's controls and connections, including:

- The front panel
- The front panel display
- The remote control
- The back panel

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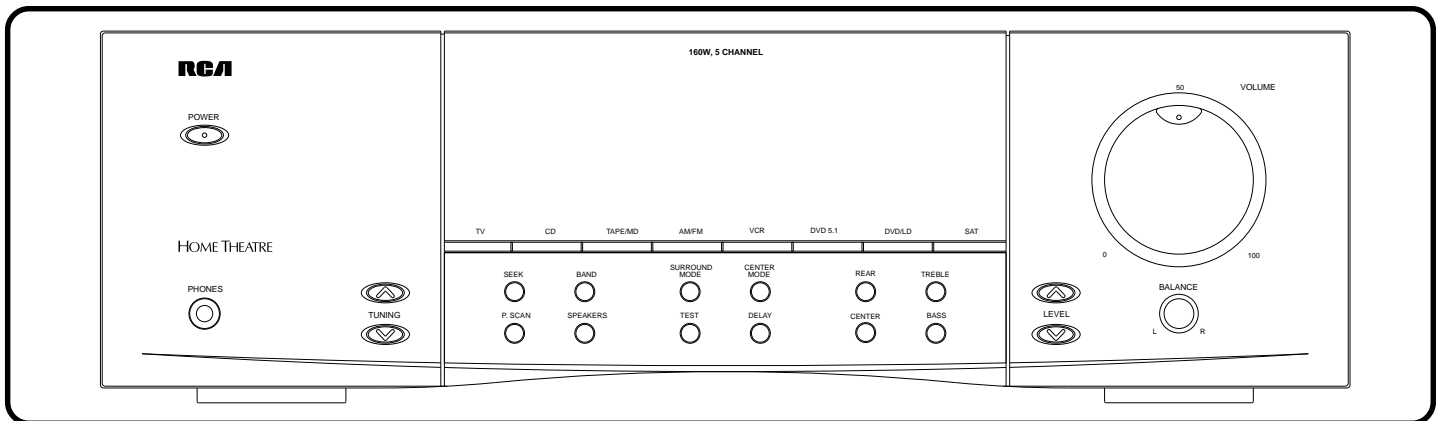
FRONT PANEL

AM/FM Activates the tuner.

BALANCE Adjusts the sound from the left and right speakers.

BAND Selects the AM or FM radio band.

BASS Accesses Bass mode so that you can adjust the bass using the LEVEL up and down buttons.

CENTER MODE Lets you select a center mode when using Dolby Pro Logic or Dolby 3 Stereo:

> **Normal** Select if you are using a small center speaker. This is the recommended mode.

> **Wide** Select if the center speaker is large or the same as the left and right speakers. The full range of Dolby Surround Center Channel is routed to the center speaker.

> **Phantom** Select when there is no center speaker. The signal intended for the center speaker is divided equally between the left and right main speakers. Phantom mode is not available in 3 Stereo mode.

CENTER Selects the center speaker so you can adjust the volume level.

CD Selects the CD player input.

DELAY Lets you choose 15, 20 or 30 milliseconds as the sound delay in the rear speaker to adjust the audio output for room size. When listening, the closer you are to the rear speakers, the higher you should set the delay. Experiment to achieve the best sound effect for your room. 20ms is recommended.

DVD/LD Selects the DVD or laserdisc player as input with conventional 2 Channel A-udio.

DVD 5.1   Selects the Decoded Dolby Digital DVD 5.1 audio input.

LEVEL   Lets you adjust the bass and treble levels, and the rear and center speaker volume levels. Works with the BASS, TREBLE, REAR and CENTER buttons.

P. SCAN   Lets you review the preset stations.

PHONES   Provides a connection for headphones.

POWER   Turns the receiver on or off. The POWER indicator, located in the center of the button, is red when the receiver is in standby.

REAR   Selects the rear speaker(s) so you can adjust the volume level.

SAT   Selects the satellite receiver input.

SEEK   Searches for AM/FM stations of sufficient strength.

TAPE/MD   Selects the tape or minidisc player as input.

SPEAKERS   Turns on and off the speakers.

SURROUND MODE   Selects a Surround Mode:

> **Dolby Pro Logic Surround**   Turns on Dolby Pro Logic surround sound with Surround sound speakers and is suggested for video, home theater, TV and some music. This is the recommended mode if you have all speakers.

> **Dolby 3 Stereo**   Turns on Dolby Pro Logic surround sound without Surround sound speakers and is suggested for video, home theater, TV and some music.

> **Hall**   Turns on Sound system without a center speaker and is suggested for classical music, jazz and other music.

> **Bypass**   Turns off the Surround circuitry. Sound is generated without effects—conventional stereo.

TEST   Turns on "pink" noise so that you can balance the speakers. Press again to turn off.

TREBLE   Accesses Treble mode so that you can adjust the treble using the LEVEL up and down buttons.

TUNING   Moves up or down the selected AM/FM band.

TV   Selects the TV as input.

VCR   Selects VCR as input.

VOLUME   Increases or decreases the volume.

> **When you connect headphones, if you do not want the main speakers on, press the SPEAKERS button to turn them off.**

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TOUR OF THE RECEIVER

STEREO SEEK MEMORY MUTE TEST

SPEAKERS OFF
□□ PRO LOGIC

$\square\square\square\square\square\square.\square\square$

PRESET
kHz
MHz

$\square\square$ mS
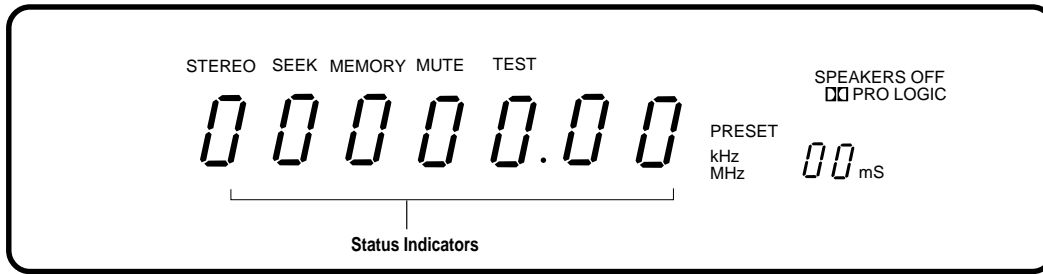
Status Indicators

FRONT PANEL DISPLAYS

The receiver's display panel shows the current status of the receiver and choices for some commands.

STATUS INDICATORS

□□**PRO LOGIC** Dolby® Pro Logic Surround mode is turned on.

kHZ An AM station is selected.

MEMORY The receiver is memorizing the frequency of the selected station.

MHz An FM station is selected.

MUTE The sound is muted. The MUTE symbol blinks in the front panel display when the sound is muted.

PRESET The receiver is tuned to a preset station. The PRESET symbol blinks in the front panel display when the receiver is scanning , stays on when you are listening to a preset station, and turns off when you manually tune the receiver.

SEEK The receiver is in seek mode and searching for a station.

SPEAKERS OFF The speakers are turned off.

STEREO An FM stereo signal is being received.

TEST The receiver is in Dolby test mode.

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TOUR OF THE RECEIVER

FUNCTION DISPLAYS

The receiver's front panel displays function information such as the frequency of the selected station when you press AM/FM or change the station, or the selected component as when you press the DVD/LD button.

STEREO

$FM107.9$

MHz

PRESET

8

Band   Station Frequency

DVD/LD

PRO LOGIC

30 mS

Function Mode
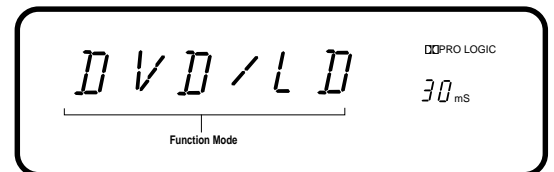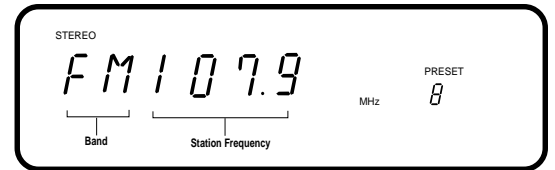
MODE DISPLAYS

The receiver's front panel displays mode information such as the selected SURROUND MODE or the selected CENTER MODE.

$HALL$

30 mS

Selected Surround Mode

$PHANTOM$

PRO LOGIC

30 mS

Selected Center Mode
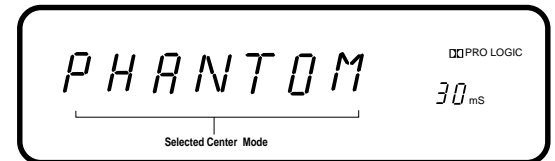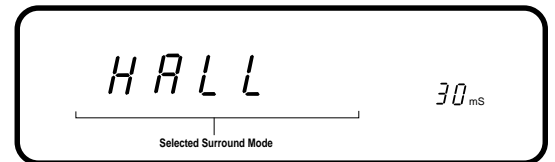
SURROUND MEMORY

If you have entered different surround modes for different pieces of equipment , the receiver saves each sourround mode independently.

The TV surround setting will always be the same as the satellite surround setting. If you do not have a satellite hooked-up, you must go into satellite mode to change the TV surround setting.

TOUR OF THE RECEIVER

REMOTE CONTROL

Your remote control is capable of operating most RCA audio and video equipment. To use the remote control effectively, always aim it directly at your receiver.

The remote control operates on four batteries, included with your system. Install them before attempting to operate the remote. Be sure to match the + and – ends of each battery to the symbols shown in the remote's battery compartment.

BASIC CONTROLS

POWER Turns the AM/FM receiver off with one press. If you have multiple components turned on and not the AM/FM receiver, pressing POWER once turns off the last component turned on. Pressing POWER again quickly turns off all other components.

VOL UP and DOWN Increases or decreases the volume.

MUTE Turns off the receiver's sound. Press again to restore the sound.

RECEIVER CONTROLS

AM•FM Activates the tuner and toggles between the AM band and the FM band.

CTR MODE Changes the Center mode when using Dolby Pro-Logic Surround or Dolby 3 Stereo surround modes. Press once and the current mode appears. Press again to change the mode.

DELAY/CH CTRL Selects the amount of Surround Sound delay between the main and rear speakers. Choose from 15, 20 or 30 milliseconds. Press once and the current setting appears. Press again to change the setting.

SURROUND Lets you select a Surround Mode: Dolby Pro Logic Surround, Dolby 3-Stereo, Hall or By-Pass. Press once and the current mode appears. Press again to change the mode.

SWAP AUDIO Swaps the audio only from the large picture to the small picture when you are watching TV and using picture-in-picture (PIP).
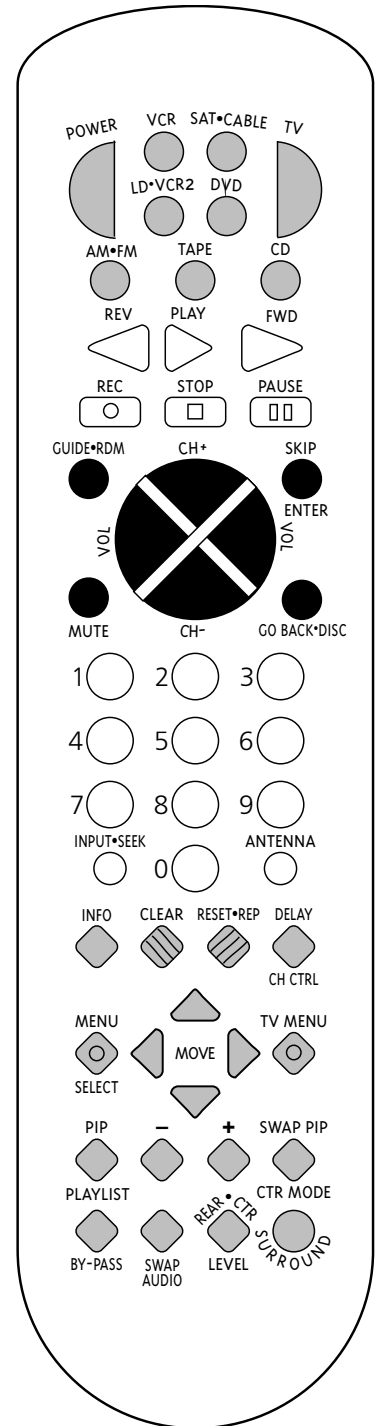
TOUR OF THE RECEIVER

SURROUND SOUND LEVEL CONTROLS

+ Increases the volume in rear and center speakers.

— Decreases the volume in rear and center speaker.

BY-PASS Turns on and off By-Pass mode, which cancels all Surround sound modes. Sound is generated without effects.

REAR•CTR LEVEL Adjusts the balance level of the rear and center speakers. Press once for Rear. Press again for Center.

RECEIVER/TUNER CONTROLS

CH + and **CH –** Tune the receiver to the next or previous preset station stored in the receiver's memory.

FWD Lets you manually move up the AM/FM band.

INPUT•SEEK Searches for and stops on AM/FM stations with signals of sufficient strength.

MENU SELECT Stores the selected station in the receiver's memory.

Number Buttons Let you enter numbers when needed.

REV Lets you manually move down the AM/FM band.

TV CONTROLS

+ On some RCA TV models, used to adjust menu controls.

— On some RCA TV models, used to adjust menu controls.

ANTENNA Changes the antenna input.

CHAN + and **CHAN —** Tunes the TV channel up and down.

CLEAR Removes any menu from the screen.

DELAY/CH CTRL In some RCA TV models, lets you control the channel that appears in the PIP window or the main screen in PIP mode.

GO BACK•DISC Returns to the previous channel.

GUIDE•RDM For some models, brings up 12 small pictures (previews of the next 12 channels in the channel list). Press again to turn off channel guide.

INFO Displays channel information.

INPUT•SEEK For some TV models, toggles through the available input sources.

MENU SELECT For some models, stores channels in the TV's memory.

You can program the remote to operate many other brands of audio and video components. See Chapter 4, Programming the Remote for details.

MOVE arrows In some models, when using PIP, moves the small picture to another corner of the screen. Also, used for menu navigation in some TV models.

Number Buttons Let you enter channel numbers and time settings when needed.

PIP Turns on and off picture-in-picture on most RCA TV models with PIP.

POWER Turns the TV off.

RESET•REP Returns picture quality controls to their original settings.

SKIP To change channels, press once. The TV will wait 30 seconds before returning to the original channel. Press repeatedly to increase the time.

SWAP PIP Swaps the main picture in the PIP window.

TV Turns on the TV and puts the remote in TV mode.

TV MENU Displays the TV's on-screen menus.

VCR CONTROLS

CHAN + and CHAN — Tunes to the next or previous channel when watching TV through the VCR.

CLEAR Resets the tape counter and corrects entries when programming the menus.

FWD Fast forwards a tape. Also, searches forward while a tape is playing.

GO BACK•DISC Returns to the previous channel.

INFO Displays channel, time and counter information on the screen.

INPUT•SEEK For some VCR models, selects line input or tuner.

LD•VCR2 For some VCR models, if programmed, turns on a second VCR and puts the remote in VCR2 mode.

MENU SELECT Displays the on-screen programming menus.

Number Buttons Let you enter numbers when needed.

PAUSE Pauses a tape.

PLAY   Plays a tape.

POWER Turns the VCR off.

REC Records a tape.

REV Rewinds a tape. Also, searches backward while a tape is playing.

> **If you have questions about the use of the remote buttons with another component, refer to the component's user's guide.**

SKIP To change channels, press once. The TV will wait 30 seconds before returning to the original channel. Press repeatedly to increase the time.

STOP Stops a tape.

VCR Turns on the VCR and puts the remote in VCR1 mode.

DVD PLAYER CONTROLS

CH + and **CH –** Changes to the next higher or lower track on DVD.

DVD Turns on the DVD player, and puts the remote in DVD mode. Switches between DVD 2 Channel Audio and DVD 5.1 Audio inputs.

FWD Scans forward on the DVD.

Number Buttons Let you change to a specific track.

PAUSE Pauses the DVD.

PLAY Plays the DVD.

PLAYLIST For some DVD models, lets you toggle through programmed playback, standard playback and random playback.

POWER Turns the DVD player off.

REW Scans backward on the DVD.

STOP Stops the DVD.

SATELLITE RECEIVER CONTROLS

ANTENNA Toggles between antenna input and satellite receiver input.

CH + and **CH —** Tunes to the next or previous channel when watching TV through the satellite system. Steps through the pages in the guide if in guide mode.

GUIDE•RDM Displays the guide on the screen.

INFO Displays satellite header on screen. When in the guide, lets you select a program. Lets you select an option in a menu.

MOVE arrows Lets you point to different on-screen menu items.

Number Buttons Let you enter numbers when needed.

POWER Turns the RCA DSS® receiver off.

SAT•CABLE Turns on the satellite receiver, and puts the remote in satellite mode.

CD PLAYER CONTROLS

CD Turns on the CD player and puts the remote in CD mode.

CLEAR Clears an entry when programming the CD player.

FWD Moves forward through the CD one track at a time.

GO BACK•DISC Selects a disc to be played. Press GO BACK •DISC and then the CD number using the number buttons.

GUIDE•RDM Activates the Random function, which plays a random selection of tracks from one or all CDs.

INFO In some CD models, lets you switch between the number track information and time information.

MENU SELECT Programs the CD changer to play up to 32 tracks in any order you choose.

Number Buttons Let you enter numbers when needed.

PAUSE Pauses the CD.

PLAY   Plays the CD.

RESET•REP Repeats a track, a CD or an entire program. Press once to repeat the currently playing track, twice for the CD or program, and three times to turn the function off.

REV Moves backward through the CD one track at a time.

STOP Stops the CD from playing.

TAPE DECK CONTROLS

FWD Fast forwards the tape.

Number Buttons Let you enter numbers when needed.

PAUSE Pauses the tape.

PLAY   Plays the tape.

POWER Turns the tape player off.

REV Rewinds the tape.

TAPE Turns on the tape player and puts the remote in tape mode.

LASERDISC PLAYER CONTROLS

CH + and **CH –** Changes to the next higher or lower chapter on the laserdisc.

FWD Scans forward on the laserdisc.

LD•VCR2 For some laserdisc models, if programmed, turns on the laserdisc player and puts the remote in laserdisc mode.

Number Buttons Let you change to a specific chapter.

PAUSE Pauses the laserdisc.

PLAY Plays a laserdisc.

PLAYLIST For some laserdisc models, if programmed, programs to playback chapters on laserdisc in a certain order

POWER Turns the laserdisc player off.

REV Scans backward on the laserdisc.

STOP Stops the laserdisc.

The buttons on the remote may not work on all other brands of components. Experiment with the remote and your components to see which buttons work.
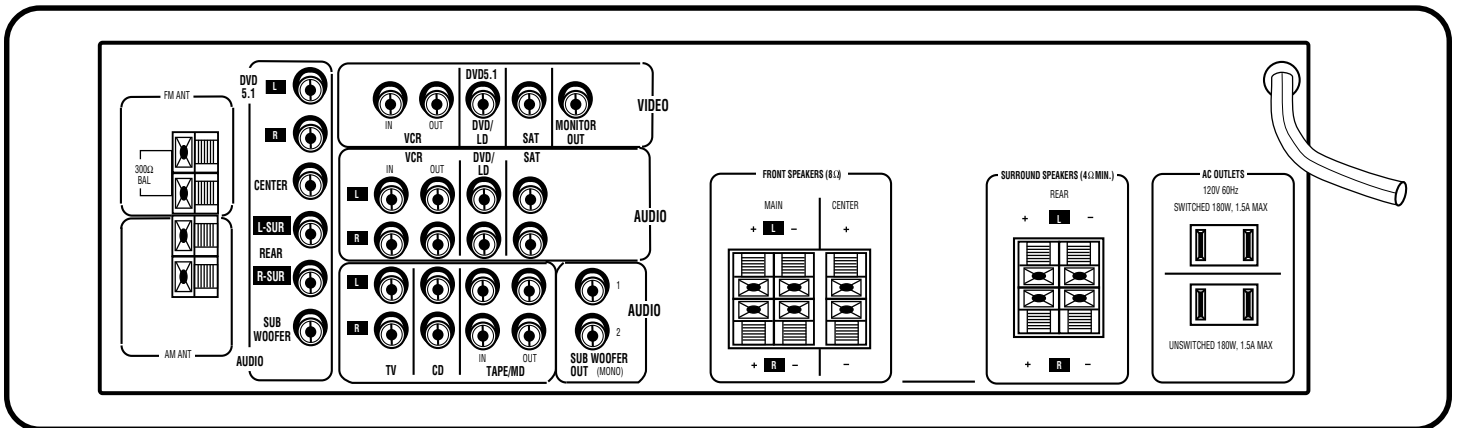
BACK PANEL

AUDIO Connections Provides audio connections for components such as a VCR, TV, CD player, laserdisc player, DVD player or tape player.

> **IN** Provides audio input from another component.

> **OUT** Sends audio output to another component, such as a minidisc, tape player or VCR. Sends a signal to the subwoofer.

VIDEO Connections Provides video connections for the video portion of another component such as a VCR, TV, laserdisc player, DVD player or satellite receiver.

> **IN** Provides video input from another video component.

> **OUT** Sends video output to another video component such as a VCR.

> **Monitor Out** Sends video output to the TV.

SPEAKERS Provides connection to the speakers.

SURROUND SPEAKERS Provides connection for the Surround Sound Speakers.

AC Outlets One switched AC outlet and one unswitched AC outlet provide A/C power outlets for other components.

FM ANT Provides connection for an FM antenna.

AM ANT Provides connection for an AM antenna..

PROGRAMMING THE REMOTE

IF YOU WANT TO USE THE REMOTE WITH YOUR TV OR OTHER COMPONENT...

The remote already works with most other RCA, GE and ProScan TVs and VCRs. You, however, can program the remote to control most brands of remote controllable TVs, VCRs, cable boxes, satellite receivers, and audio equipment.

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PROGRAMMING THE REMOTE

You can program the remote to control most brands of remote controllable TVs, VCRs and cable boxes. If you have an RCA, GE or ProScan product, you may not need to program the remote at all. Other manufacturer's brands need to be programmed.

PROGRAMMING THE REMOTE TO CONTROL A TV

To determine whether you need to program the remote, turn on the TV, point the remote at the TV's remote sensor and press TV. Then, press the POWER, or CH **+** or CH **–** button to see if the TV responds to the remote commands. If not, you need to program the remote.

Follow these steps to program your remote to control your TV:

1. Turn on the TV.
2. Look up your TV brand and code number(s) in the code list on the next page or on the code sheet packed with your remote.
3. Press and hold the TV button on the remote.
4. Enter the three-digit code from the code list.
5. Release the TV button, then press POWER to see if the TV responds to the remote commands. If not, try pressing TV then POWER.
6. Repeat steps 3 through 5 using the next code listed for your TV brand until the TV responds to the remote commands.

> **This remote may not operate all models of the brands shown.**
>
> **If a battery is removed from the battery compartment of the remote control, all control key functions will return to the original mode.**

PROGRAMMING THE REMOTE

REMOTE TV CODES

Admiral 005

Amtron 064

Akai 002, 103

A-Mark 102

Anam 104, 105

Anam National.................... 038, 106

AOC 011, 019, 027, 088, 107

Bell & Howell 005

Candle 011, 027, 033

Citizen 011, 027, 033, 064

Colortyme 011, 027, 084

Concerto 011, 027

Contec/Cony 036, 037, 040, 042, 064

Craig 064

Curtis Mathes 000, 011, 015, 027, 037

CXC 064

Daewoo............... 011, 019, 027,112

Daytron 011, 027

Dimensia 000

Electrohome 006, 011, 014, 027, 038, 061, 068

Emerson 011, 026, 027, 028, 029, 030, 031, 032, 037, 042, 053, 064, 065, 067, 075, 076, 078, 079, 094, 095, 096

Envision............................. 011, 027

Fisher 017, 021, 039, 041

Funai.. 064

GE 000, 008, 009, 011, 012, 027, 038, 068, 086, 089, 091

Goldstar 003, 004, 006, 011, 019, 027, 037, 050

Hallmark 011, 027

Hitachi 009, 011, 027, 036, 037, 040, 047, 048, 063, 080, 094, 097, 098

Infinity 013

JBL.. 013

JC Penney........... 000, 008, 011, 019, 027, 040, 068, 077, 086, 088

Jensen 011, 027

JVC 012, 024, 036, 037, 040, 048, 051, 074

Kawasho 002, 011, 027

Kenwood 006, 011, 014, 027

Kloss Novabeam 035, 043

KTV 078

Loewe 013

Luxman 011, 027

LXI 000, 013, 018, 021, 023, 054

Magnavox 006, 007, 010, 011, 013, 016, 027, 033, 035, 043, 049, 066, 087, 089

Marants 013

Marantz 011, 013, 027, 069

Memorex.................................... 005

MGA 006, 011, 014, 019, 022, 027, 041, 056, 061, 068

Mitsubishi 006, 011, 014, 019, 022, 027, 041, 055, 056, 061, 068

MTC 011, 019, 027

Multivision................................. 081

NAD 018, 023

NEC 011, 014, 019, 027, 038, 084

Panasonic ... 012, 013, 038, 086, 111

Philco................. 006, 007, 010, 011, 013, 016, 019, 027, 033, 035, 037, 038, 043, 087, 089

Philips................ 002, 006, 007, 010, 011, 013, 016, 033, 035, 037, 038, 043, 066, 073

Pioneer.............. 011, 027, 045, 062, 093

Portland 011, 019, 027, 037

ProScan 000

Proton 011, 027, 037, 072

Quasar 012, 038, 092

Radio Shack 000, 021, 025, 036, 037, 059, 064, 078

RCA 000, 006, 011, 019, 027, 034, 038, 044, 046, 088, 100, 101, 109

Realistic...................................... 021

Sampo 011, 027

Samsung............ 006, 011, 014, 015, 019, 027, 036, 037, 077, 110

Sanyo .. 017, 021, 039, 056, 057, 058

Scott 028, 037, 064

Sears 000, 006, 011, 014, 017, 018, 021, 023, 027, 039, 040, 041, 051, 071, 083, 095

Sharp 011, 020, 025, 027, 037, 052, 053, 059, 060, 108

Signature 005, 094

Sony 002

Soundesign 011, 027, 033

Sylvania 006, 007, 010, 011, 013, 016, 027, 033, 035, 043, 049, 066, 087, 089

Symphonic 064, 076

Tatung 038

Technics 012

Techwood 011, 027

Teknika 011, 019, 027, 033, 036, 037, 040, 066

Telecaption 090

TMK 011, 027

Toshiba 018, 021, 023, 040, 071, 077, 085, 090

Universal 008, 009

Victor 051

Vidtech 019, 027

Wards 000, 005, 006, 007, 008, 009, 010, 011, 013, 019, 025, 027, 028, 035, 043, 059, 066, 076, 082, 089

Yamaha 006, 014, 019, 027

Zenith 001, 099

PROGRAMMING THE REMOTE TO CONTROL A VCR

To determine whether you need to program the remote, turn on the VCR, point the remote at the VCR's remote sensor, and press VCR. Then, press the POWER or CH + or CH – button to see if the VCR responds to the remote commands. If not, you need to program the remote.

Follow these steps to program your remote to control your VCR:

1. Turn on the VCR.

2. Look up your VCR brand and code number(s) in the code list on the next page or on the code sheet packed with your remote.

3. Press and hold the VCR1 button on the remote.

4. Enter the three-digit code from the code list.

5. Release the VCR button, then press POWER to see if the VCR responds to the remote commands. If not, try pressing VCR then POWER.

6. Repeat steps 3 through 5 using the next code listed for your VCR brand until the VCR responds to the remote commands.

> **This remote may not operate all models of the brands shown.**
>
> **To program the LD•VCR2 button to control a second VCR, follow these steps but use the LD•VCR2 button instead of the VCR button.**

PROGRAMMING THE REMOTE

Admiral 006

Aiwa 015

Akai 003, 017, 022, 023, 063, 066

Audio Dynamics 014, 016

Bell & Howell 002

Broksonic 010

Candle 007, 009, 013, 044, 045, 046, 052

Canon 008, 053

Capehart 001

Citizen 007, 009, 013, 044, 045, 046, 052

Colortyme 014

Craig 007, 012

Curtis Mathes .. 000, 007, 008, 014, 015, 044, 046, 053, 064, 067

Daewoo 013, 045, 052, 076

dbx 014, 016

Dimensia 000

Dynatech 015

Electrohome 027

Emerson 008, 009, 010, 013, 015, 020, 023, 027, 034, 041, 042, 047, 049, 057, 062, 065, 067, 068, 070

Fisher 002, 012, 018, 019, 043, 048, 058

Funai 015

GE 000, 007, 008, 032, 037, 053

Goldstar 009, 014, 046, 060

Harman Kardon 014

Hitachi 005, 015, 035, 036

Instant Replay 008

JCL 008

JC Penney 002, 005, 007, 008, 014, 016, 030, 035, 051, 053

JVC 002, 014, 016, 030, 046, 074

Kenwood 002, 014, 016, 030, 044, 046

KLH 073

Lloyd's 015

Logik 031

Magnavox 008, 029, 053, 056

Marantz 002, 008, 014, 016, 029, 030, 044, 046, 061

Marta 009

MEI 008

Memorex 008, 009, 012, 015

MGA 004, 027

Midland 032

Minolta 005, 035

Mitsubishi 004, 005, 027, 035, 040

Montgomery Ward 006

MTC 007, 015

Multitech 007, 015, 031, 032

NEC 002, 014, 016, 030, 044, 046, 059, 061, 064

Panasonic 008, 053, 075, 077

Pentax 005, 035, 044

Pentex Research + ... 046

Philco 008, 029, 053, 056

Philips 008, 029

Pioneer 005, 016, 050

Portland 044, 045, 052

ProScan 000

Quartz 002

Quasar 008, 053

RCA 000, 005, 007, 008, 028, 035, 037, 054, 069

Radio Shack/Realistic 002, 006, 008, 009, 012, 015, 019, 027, 043, 053

Samsung 007, 013, 022, 032, 042

Sansui 016, 071

Sanyo 002, 012

Scott 004, 013, 041, 049, 068

Sears 002, 005, 009, 012, 018, 019, 035, 043, 048

Sharp 006, 024, 027, 039, 045

Shintom 017, 026, 031, 055

Signature 015

Sony 017, 026, 038

Sylvania 008, 015, 029, 053, 056

Symphonic 015

Tandy 002, 015

Tashiko 009

Tatung 030

Teac 015, 030, 069

Technics 008

Teknika 008, 009, 015, 021

TMK 067

Toshiba 005, 013, 019, 048, 049

Totevision 007, 009

Unitech 007

Vector Research 014, 016, 044

Victor 016

Video Concepts 014, 016, 044

Videosonic 007

Wards 005, 006, 007, 008, 009, 012, 013, 015, 025, 027, 031, 035

Yamaha 002, 014, 016, 030, 046

Zenith 011, 017, 026, 072

PROGRAMMING THE REMOTE

PROGRAMMING THE REMOTE TO CONTROL AN AUDIO COMPONENT

To program the remote for a remote-controllable audio component, point the remote at the component and press the correct component button: CD for a CD player, TAPE for a tape player, etc. Then, press POWER or CH **+** or CH **–** . If the component doesn't respond, the remote needs to be programmed. Use the codes in the code list on the next page or on the sheet packed with your remote.

Follow these steps to program your remote to control your audio component:

1. Turn on the component to be programmed.
2. Look up the brand and corresponding code number in the code list on the next page or on the code sheet packed with your remote.
3. Press and hold the component button on the remote.
4. Enter the three-digit code from the code list.
5. Release the component button, then press POWER to see if the component responds to the remote commands. If it doesn't, try pressing the component button, then POWER again.
6. Repeat steps 3 through 5 using the next code listed for the brand of your component until the component responds to the remote commands.

This remote may not operate all models of the brands shown.

AUDIO CODES		
ads:	AMP	001
Aiwa:	CD	060
Akai:	AMP	002, 008
Denon:	CD	057
Dynamic Bass:	AM/FM	029
	CD	025
	TAPE	026, 027
	PHONO	028
Emerson:	CD	066
Fisher	AMP	023
	CD	067
Hitachi:	CD	063
JVC:	AMP	016, 058
	AM/FM	030, 035
	CD	032
	TAPE	033, 034
	AUX	031
Kenwood:	AMP	017, 074
	AM/FM	074
	CD	067, 070, 077
	TAPE	071, 072
	PHONO	073
Kyocera:	AMP	009
Lotte (NEC):	AMP	075
Magnavox:	AMP	065
	AM/FM	065
	CD	061
Marantz:	AMP	022, 076
	AM/FM	076
	CD	068
Mitsubishi:	AMP	015, 059
	AM/FM	059
Nakamichi:	AMP	020
Onkyo:	AM/FM	082
	CD	078
	TAPE	080, 081
	PHONO	079
Panasonic:	AMP	012
	AM/FM	038
	CD	036, 083
	TAPE	037
Philips:	AMP	062
	AM/FM	062
	CD	061
Pioneer:	AMP	014
	AM/FM	042
	CD	039
	TAPE	040, 041
RCA:	AMP	024
	AM/FM	003
	CD	007, 043, 044
	TAPE	006
	PHONO	005
	AUX	004, 054
Realistic:	CD	063, 066
Sansui:	CD	045
Scott:	CD	066
	TAPE	055, 056
Sherwood:	AMP	011, 013
Sony:	AMP	021
	AM/FM	049
	CD	046
	TAPE	048, 053
	PHONO	047
Teac:	AMP	010
	CD	069
Technics:	AM/FM	052
	CD	050
	TAPE	051
Yamaha:	AMP	018, 019

PROGRAMMING THE REMOTE

PROGRAMMING THE REMOTE TO CONTROL A CABLE BOX

Refer to the cable box connection page or contact your cable company to hook up your cable box. You may be able to program the remote for your remote controllable cable box. Use the codes in the code list on the right or on the sheet packed with your remote.

1. Turn on the cable box.

2. Look up the cable box brand and its code number(s) in the code list on the next page or on the code sheet packed with the remote.

3. Press and hold the SAT•CABLE button on the remote.

4. Enter the three-digit code from the code list.

5. Release the SAT•CABLE button, then press POWER or CH + or CH – to see if the cable box responds to the remote commands. If not, try pressing SAT•CABLE, then POWER again to see if the cable box responds.

6. Repeat steps 3 through 5 using the next code listed for the brand of your cable box until the cable box responds to the remote commands.

REMOTE CONTROLLABLE CABLE BOX CODES

Brand	Codes
ABC	022, 046, 053, 054
Anvision	007, 008
Cablestar	007, 008
Diamond	056
Eagle	007, 008
Eastern International	002
General Instrument	046
GI 400	004, 005, 015, 023, 024, 025, 030, 036
Hamlin	003, 012, 013, 034, 048
Hitachi	037, 043, 046
Jerrold	004, 005, 015, 023, 024, 025, 030, 036, 045, 046, 047, 062, 065
Macom	037, 043
Magnavox	007, 008, 019, 021, 026, 028, 029, 032, 033, 040, 041
NSC	009
Oak	001, 016, 038
Oak Sigma	016
Panasonic	003, 027, 039, 061
Philips	007, 008, 019, 021, 026, 028, 029, 032, 033, 040, 041
Pioneer	018, 020, 044
Randtek	007, 008
RCA	000, 027
Regal	003, 012, 013
Regency	002, 033
Samsung	044
Scientific Atlanta	003, 022, 035, 063, 064
Signature	046
Sprucer	027
Starcom	046
Stargate 2000	058
Sylvania	011, 059
Teknika	006
Texscan	010, 011, 059
Tocom	017, 021, 049, 050, 055
Unika	031, 032, 041
Universal	051, 052, 060
Viewstar	007, 008, 019, 021, 026, 028, 029, 032, 033, 040, 041
Warner Amex	044
Zenith	014, 042, 057, 061

This remote may not operate all models of the brands shown.

PROGRAMMING THE REMOTE

PROGRAMMING THE REMOTE TO CONTROL A LASERDISC PLAYER

You may be able to program your remote to control a laserdisc player. Use the codes shown to the right or on the sheet packed with your remote.

Follow these steps to program your remote to control your laserdisc player:

1. Turn on the laserdisc player.
2. Look up the brand and its code number(s) in the code list.
3. Press and hold the LD•VCR2 button on the remote.
4. Enter the three-digit code from the code list.
5. Release the LD•VCR2 button, then press POWER to see if the laserdisc player responds to the remote commands. If it doesn't, try pressing LD•VCR2, then POWER again.
6. Repeat steps 3 through 5 using the next code listed for your brand until the laserdisc player responds to the remote commands.

PROGRAMMING THE REMOTE TO CONTROL A DVD PLAYER

The remote is preprogrammed to control a RCA DVD player. A few of the remote buttons used with a DVD player are shown below. You may want to experiment with other buttons on the remote to see if they work with your DVD player.

Receiver Remote (works like)	DVD Remote
INFO	INFO
GO BACK	GO BACK
CLEAR	CLEAR
MENU SELECT	MENU SELECT
MOVE Arrows	ARROWS
PLAYLIST	PLAYLIST
ENTER	ENTER

This remote may not operate all models of the brands shown.

PROGRAMMING THE REMOTE

PROGRAMMING THE REMOTE TO CONTROL AN RCA BRAND DSS® RECEIVER

The remote is preprogrammed to control the RCA DSS® receiver. A few of the remote buttons used with the RCA DSS® receiver are shown below. You may want to experiment with other buttons on the remote to see if they work with your receiver.

Receiver Remote (works like)	RCA DSS® Remote
INFO	SELECT/DISPLAY
GO BACK	PREV CH
ANTENNA	TV/SAT
CLEAR	CLEAR
MENU/SELECT	MENU
MOVE ARROWS	ARROWS

PROGRAMMING THE REMOTE TO CONTROL A SATELLITE RECEIVER

1. Turn on the satellite receiver.
2. Look up the satellite receiver brand and corresponding code number(s) in the code list on the right.
3. Press and hold the SAT•CABLE button on the remote.
4. Enter the three-digit code from the code list.
5. Release the SAT•CABLE button, then press POWER or CH + or CH – to see if the receiver responds to the remote commands. If it doesn't, try pressing SAT•CABLE, then POWER again.
6. Repeat steps 3 through 5 using the next code listed for the brand of your receiver until the receiver responds to the remote commands.

SATELLITE RECEIVER CODES

Chaparral	080, 081
Cheyenne	081
Drake	082, 083
RCA DSS® System	000
General Instruments	092, 093, 094
RCA	000
Realistic	084
Sierra I,II,III	081
STS1	085
STS2	086
STS3	087
STS4	088
Toshiba	089
Uniden	090
Video Cipher II	091

DSS® is a registered trademark of DIRECTV, INC., a unit of Hughes Electronics Corporation.

This remote may not operate all models of the brands shown.

APPENDIX A: CONNECTING THE RECEIVER

THINGS TO KNOW BEFORE CONNECTING THE COMPONENTS

- Protect components from power surges.

- Connect all components before plugging any power cords into the wall outlet.

- Always turn off the receiver and/or components before you connect or disconnect any cables.

- Always make sure the color-coded plugs match the color of the terminals in which they are inserted. The connection cable plugs and jacks are color-coded as follows:

  Speaker Terminals Red for positive (**+**) terminals. Black for negative (**—**) terminals.

  RCA Phono Terminals Red for the right (R) channel. White for the left (L) channel. Yellow for the video (V). Black for the subwoofer.

- Some units may be supplied with connection plugs that are color coded red and black instead of red and white. In this case, the black plug takes the place of the white plug.

POSITION CABLES CORRECTLY TO AVOID AUDIO HUM OR INTERFERENCE

- Insert all cable plugs firmly into their jacks.

- Place audio/video cables to the sides of the receiver's back panel instead of straight down the middle after you connect the components.

- Try not to coil any power cables and keep them away from the audio/video cables as much as possible.

- Make sure all antennas and cables are properly grounded. Refer to the Safety Tips sheet packed with your receiver.

1 FIRST THINGS FIRST

2 OPERATING THE RECEIVER

3 TOUR OF THE RECEIVER

4 PROGRAMMING THE REMOTE

PROTECT YOUR COMPONENTS FROM OVERHEATING

- Do not block ventilation holes in any component. Arrange the components so that air can circulate freely.

- Do not stack components directly on top of each other.

- Allow adequate ventilation when placing your components in a stand.

- Place an amplifier on the top shelf of the stand so heating air rising from it will not flow around other components. If you have a satellite receiver, you should place it on the top shelf.

USING THE "SWITCHED OUTLET"

- When another component is plugged into the "switched" AC outlet on the back of the receiver, the receiver power button will operate the power for the other component.

- Do *not* plug your TV or VCR in the "switched" outlet on the back of the receiver.

USING THE SUBWOOFER CONNECTIONS

You can connect the subwoofer outlet jacks to powerful subwoofers, such as the RCA SP3500SW. Connect one of the black terminals on the back of the receiver to the subwoofer's line input. If the subwoofer has two input jacks, connect the receiver to the input jack labeled "Mono." If there is no label for Mono, use the right input jack. If a second subwoofer is used, connect it to the remaining receiver output jack.

See the subwoofer's user's manual for specific information about adjusting the subwoofer.

AC OUTLETS
120V 60Hz
SWITCHED 180W, 1.5A MAX

UNSWITCHED 180W, 1.5A MAX

AC Outlets
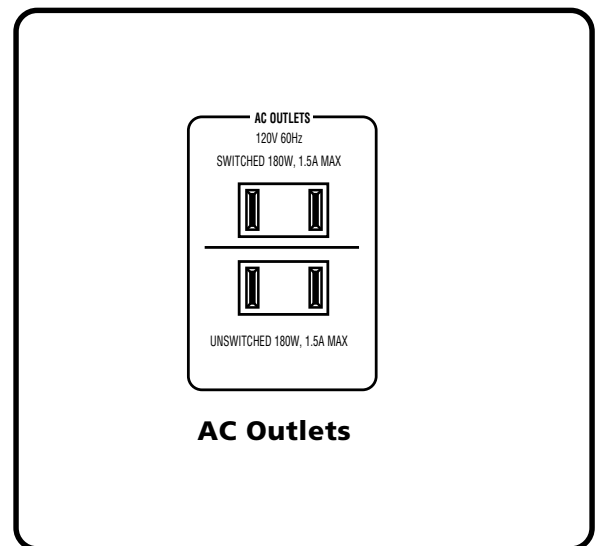
TV AND VCR

THIS CONNECTION PROVIDES

- stereo or surround sound from TV programs broadcast in stereo
- stereo, surround sound or mono sound from a VCR
- viewing one channel on TV while recording another channel

Caution: The unauthorized recording of television programs and other materials may infringe the rights of others.

TO USE THIS CONNECTION, YOU SHOULD HAVE

- (3) paired (red/white) stereo cables
- (3) single (yellow) video cables
- (2) coaxial cables

If your TV has more than one video input, make sure the VCR1, LD•VCR2 and SAT buttons tune the TV to the same channel that the receiver monitor out is plugged into.

Refer to the TV's user's guide for more information.

TO CONNECT

1. Connect the cables as shown in the diagram below.

USING THIS CONNECTION

To watch TV programs

1. Turn off the VCR.
2. Press TV and tune to a channel.

To watch or play a tape on the VCR

1. Press VCR.
2. Press PLAY.

To record one program and watch another

1. Press VCR and tune to a channel.
2. Begin recording.
3. Make sure TV/VCR switch on the VCR is set to TV.
4. Press TV and tune to a channel.
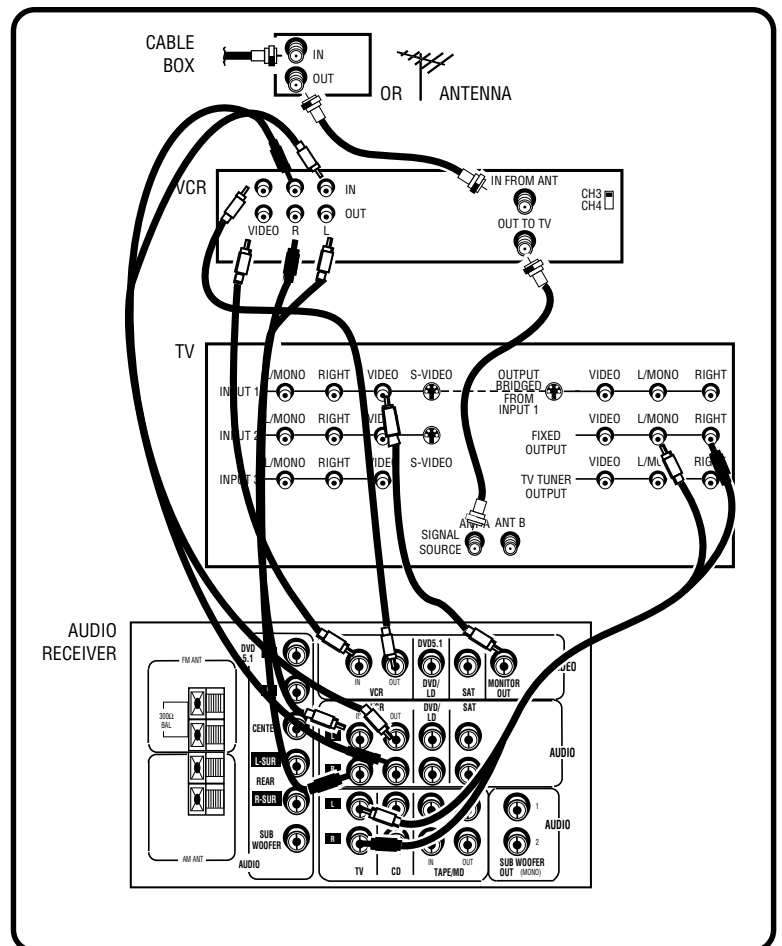
RCA DSS® RECEIVER

THIS CONNECTION PROVIDES

• stereo or surround sound from programs broadcast in stereo

• stereo sound from the RCA DSS® receiver.

TO USE THIS CONNECTION, YOU MUST HAVE

• (1) paired (red/white) stereo cable
• (1) single (yellow) video cable
• (2) coaxial cables

TO CONNECT

1. Connect the cables as shown in the diagram below.

USING THIS CONNECTION

To watch TV programs in stereo

1. Press TV and tune to a channel.

To watch satellite programming

1. Press SAT•CABLE.
2. Tune to a channel.
3. Follow the instructions in the RCA DSS® User's Guide.

> **Do not stack electronic components or other objects on top of the RCA DSS® receiver. The slots on top of the receiver must be left uncovered to allow proper airflow to the unit. Blocking the airflow to the unit could impair performance or damage your receiver and other components. Also, do not stack the RCA DSS® receiver on top of a "hot component" such as an audio power amplifier.**
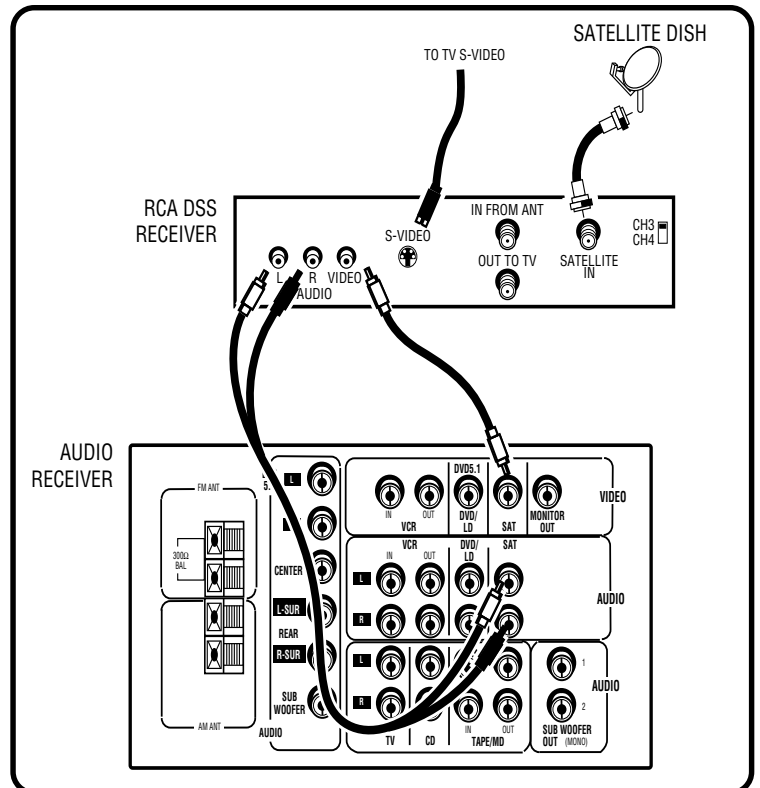
DVD PLAYER

THIS CONNECTION PROVIDES

• stereo or surround sound from the DVD player

TO USE THIS CONNECTION, YOU SHOULD HAVE

• (1) paired (red/white) stereo cable
• (1) single (yellow) video cable

TO CONNECT

1. For DVD 2 Channel Audio, connect as shown in Diagram A.
2. For DVD 5.1 Audio, connect as shown in Diagram B.

USING THIS CONNECTION

To play a DVD

1. Press DVD to put the receiver in DVD mode.
2. Press play.

DIAGRAM B
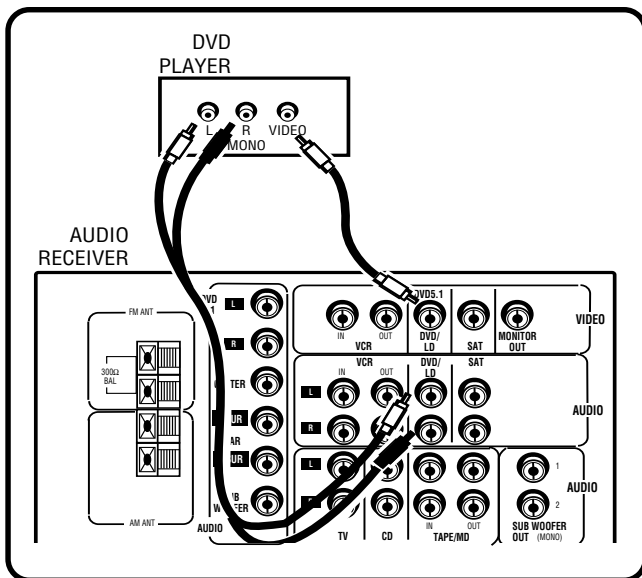
DIAGRAM A
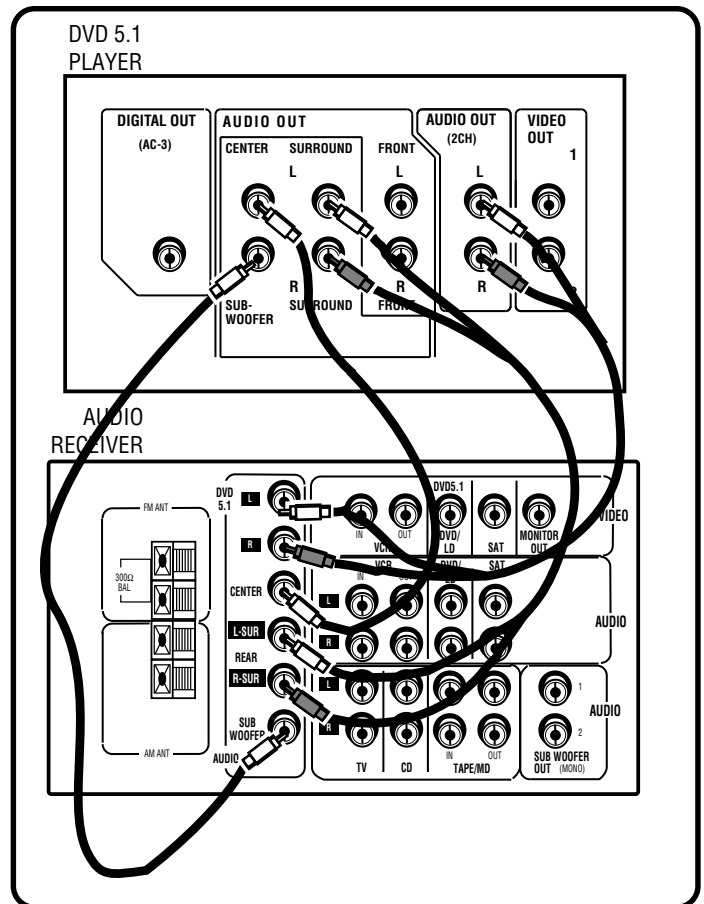
SECOND VCR

Using this connection enables you to play a video tape but not record a tape.

THIS CONNECTION PROVIDES

• stereo, surround sound, or mono on the VCR
• VCR playback only

TO USE THIS CONNECTION, YOU SHOULD HAVE

• (1) paired (red/white) stereo cable
• (1) single (yellow) video cable
• (1) coaxial cable

TO CONNECT

1. Connect the cables as shown in the diagram below. (Note the connection on the receiver is labeled DVD/LD, but the remote button is labeled LD•VCR2.)

USING THIS CONNECTION

To play a tape on the second VCR

1. Press LD•VCR2 on your remote.
2. Press PLAY.
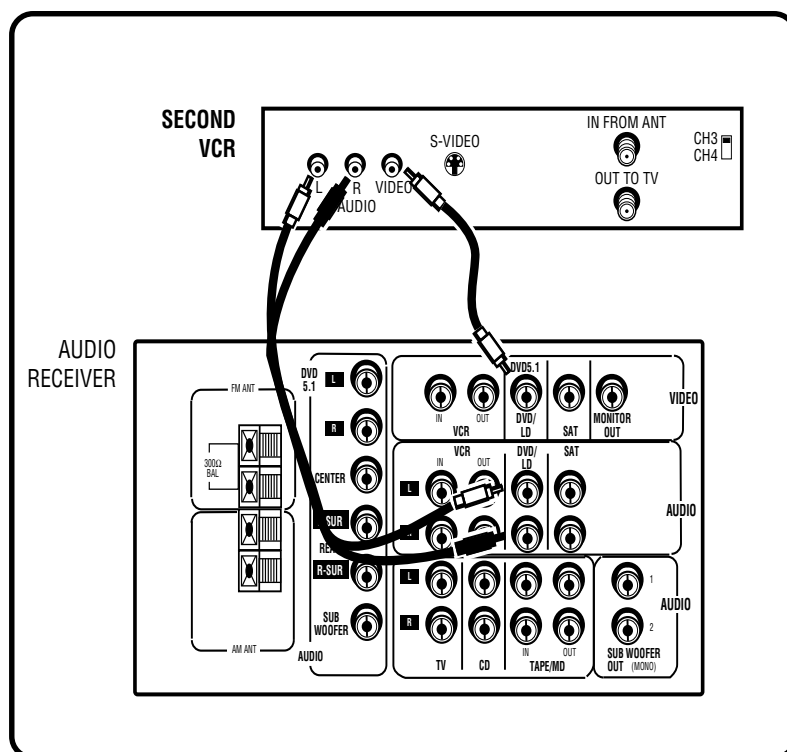
CAMCORDER OR VIDEO CAMERA

If your camcorder or video camera does not have an RCA type terminal for audio/video, you can purchase an adapter from an RCA dealer or electronics parts store.

THIS CONNECTION PROVIDES

• stereo sound if the camcorder records or plays in stereo

TO USE THIS CONNECTION, YOU SHOULD HAVE

• (1) paired (red/white) stereo cable
• (1) single (yellow) video cable

TO CONNECT

1. Connect the cables as shown in the diagram below.

   If the DVD/LD connection is being used, connect the camcorder or video camera to any other available video input.

USING THIS CONNECTION

To play the camcorder

1. Turn on the camcorder or video camera.
2. Press LD•VCR2 on your remote.
3. Press PLAY on the camcorder or video camera.
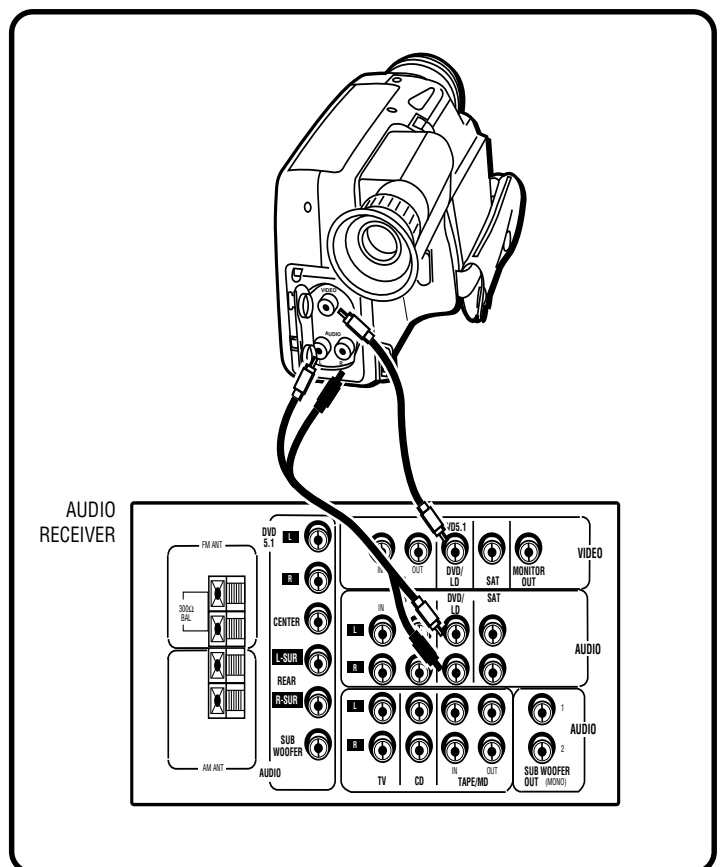
LASERDISC PLAYER

You can connect a laserdisc or a second VCR to the DVD/LD connection. Using this connection, you can play a laserdisc in stereo, surround sound.

Note: Only one of the three items may be connected at a time. (Either the laserdisc, the second VCR or the DVD player.)

THIS CONNECTION PROVIDES

• stereo or surround sound from the laserdisc

TO USE THIS CONNECTION, YOU SHOULD HAVE

• (1) paired (red/white) stereo cable
• (2) single (yellow) video cables

TO CONNECT

1. Connect the cables as shown in the diagram below.

USING THIS CONNECTION

To play the laserdisc

1. Press LD•VCR2 on your remote.
2. Press PLAY.
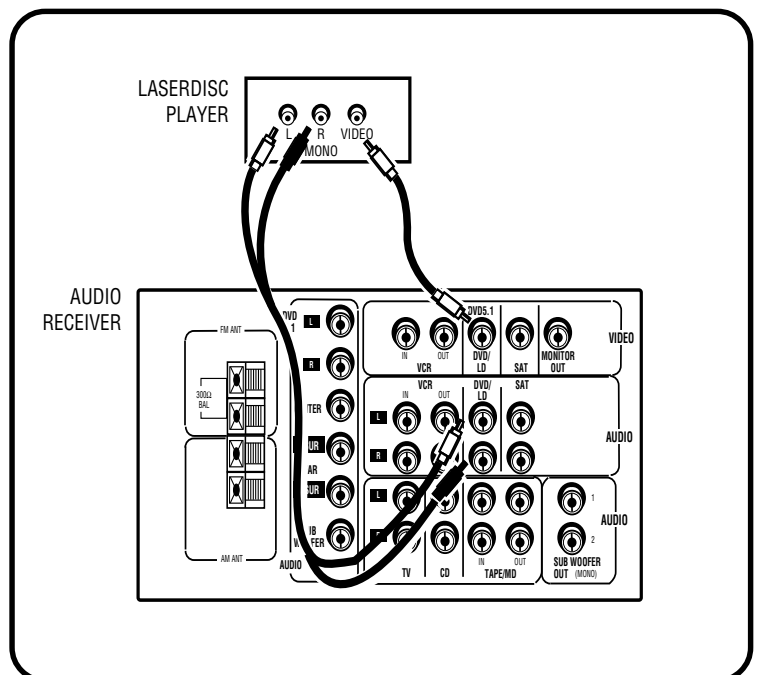
COMPACT DISC PLAYER

THIS CONNECTION PROVIDES

• Stereo or surround sound, if available

TO USE THIS CONNECTION, YOU SHOULD HAVE

• (1) paired (red/white) stereo cable

TO CONNECT

1. Connect the cables as shown in the diagram below.

USING THIS CONNECTION

To play a CD

1. Turn on the CD player, if the remote is not programmed to control the CD player.
2. Press CD to put the receiver in CD mode.
3. Press PLAY.

> **The AUDIO SOURCE connection can be used as input for any stereo audio signal.**
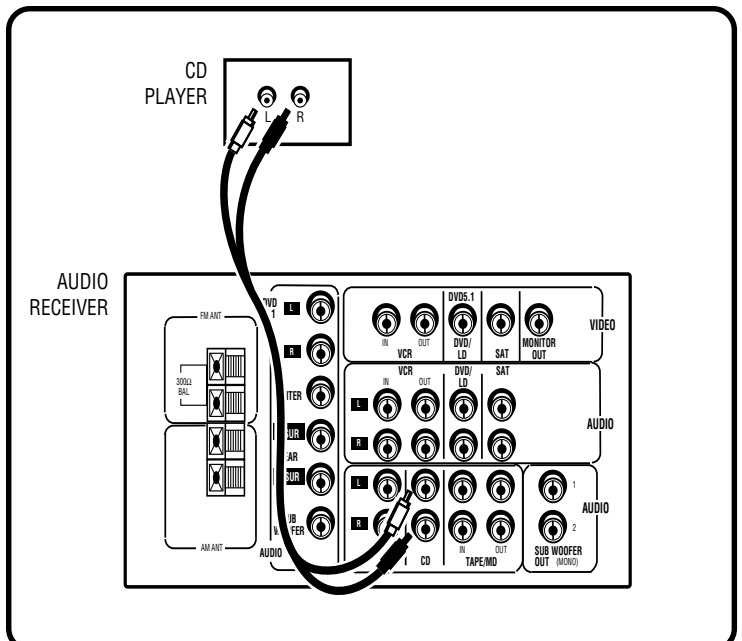
TAPE DECK OR MINIDISC PLAYER

THIS CONNECTION PROVIDES

• Stereo or surround sound, if available

TO USE THIS CONNECTION, YOU SHOULD HAVE

• (2) paired (red/white) stereo cables

TO CONNECT

1. Connect the cables as shown in the diagram below.

USING THIS CONNECTION

To play a tape

1. Press TAPE/MD.
2. Press PLAY.

To record a tape

1. Turn on the audio source you want to record.
2. Press RECORD on the tape player.

To play a minidisc

1. Press TAPE/MD.
2. Press PLAY.
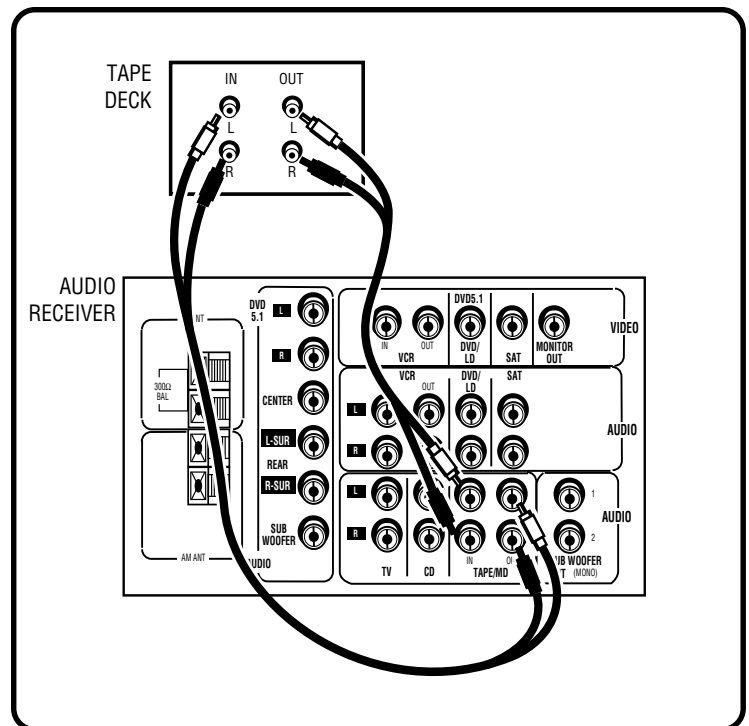
ANTENNAS

Extend the FM antenna to its full length and adjust it for the best reception.

After you adjust the AM antenna, place it on a level surface or attach it to a wall using the holes in the antenna's base.

THIS CONNECTION PROVIDES

• stereo sound from FM stations
• mono sound from AM stations

TO USE THIS CONNECTION, YOU MUST HAVE

• (1) FM wire antenna (included)
• (1) AM loop antenna (included)

TO CONNECT

1. Connect the cables as shown in the diagram below.

USING THIS CONNECTION

To listen to the radio

1. Turn on the receiver.
2. Select a band (AM/FM).
3. Turn to the desired frequency.
4. Adjust the position of the antenna as needed.

FM Wire Antenna

FM ANT

300Ω
BAL

AM ANT

AM Loop Antenna
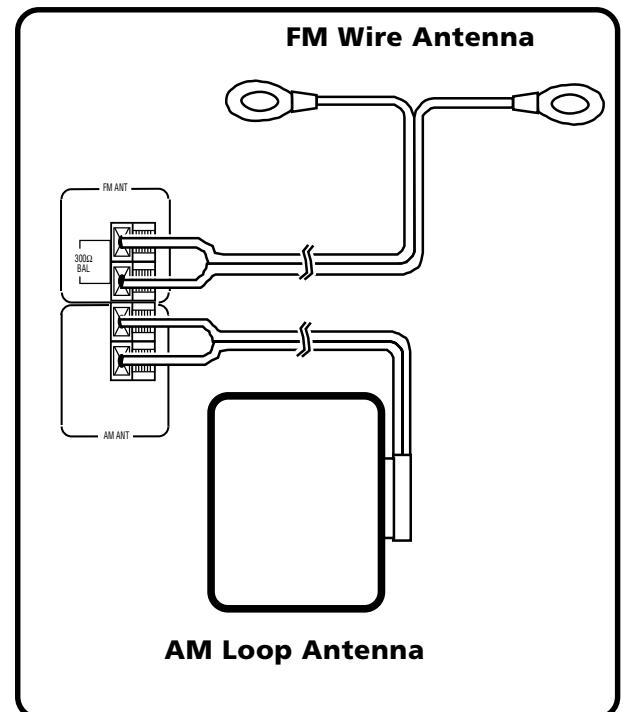
APPENDIX A: CONNECTING THE RECEIVER

SPEAKERS

All wires must be securely fastened in their terminals. A loose connection can cause intermittent sound or noise, and can damage your receiver.

If you are using Surround speakers, you must connect both speakers.

MAIN SPEAKERS

• Connect the left main speaker to the MAIN L terminals.
• Connect the right main speaker to the MAIN R terminals.

REAR SPEAKERS

• Connect the left rear speaker to the REAR L terminal.
• Connect the right rear speaker to the REAR R terminal.
• Position the speakers behind you in your TV room. To improve the surround sound effect, you may prefer to set or mount the speakers several feet off the floor.

CENTER SPEAKER

• Connect the center speaker to the CENTER terminal.

CONNECTING SPEAKERS TO THE RECEIVER

1. If necessary, remove the vinyl covering from the ends of the speaker wire and twist the wire.
2. Press down and hold the lever on the speaker terminal.
3. Insert the wire in the hole. Be sure to connect the (+) to (+) and the (-) to (-). Otherwise, the speakers will not be "in phase", causing reduction in bass frequencies.
4. Release the lever. Pull gently on the wire to make sure it is secure.

CONNECTING THE SUBWOOFER

1. Using a single audio cable, connect the subwoofer to the SUB WOOFER 1 or 2 connection.

Speaker Connections
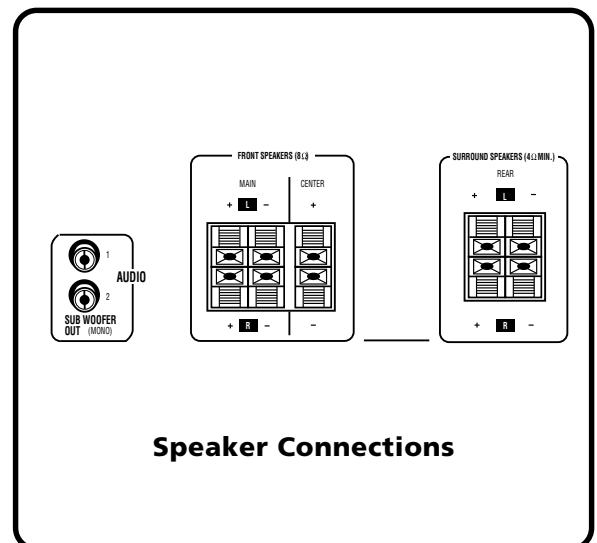
SPEAKER PLACEMENT

These diagrams offer suggested speaker placements that can enhance your home theater experience.

Place the subwoofer anywhere you want.

EXAMPLE 1

This five-speaker configuration is an effective option for recreating in any room the full cinema experience. It can be adapted to suit your taste and listening space. This five-speaker configuration is an effective option for Dolby ProLogic and DVD 5.1 sound applications.
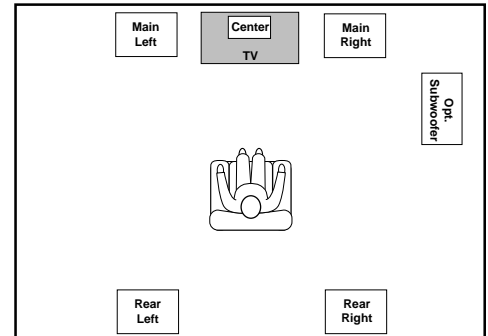
EXAMPLE 2

This configuration is recommended for four speakers. It provides Dolby Pro Logic Surround sound without a center speaker. Choose Phantom for the Center mode.
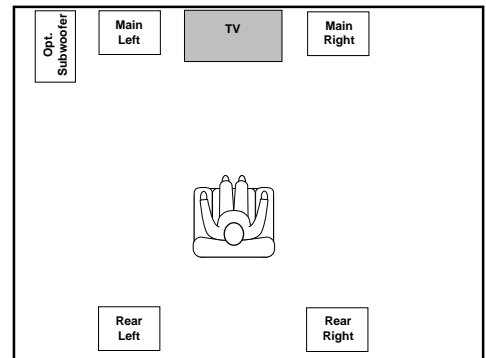
APPENDIX C: TROUBLESHOOTING

TROUBLESHOOTING GUIDE

Before referring to the checklist below, make sure you have correctly followed the connecting and operating procedures. If you have any questions that this booklet cannot answer, please call your nearest RCA dealer.

RECEIVER/TUNER OPERATION

STEREO indicator is off.
- Adjust the antenna.
- The signal is too weak. Connect an external antenna.
- The signal is Mono.

Severe hum or noise.
- The signal is too weak. Connect an external antenna.
- Adjust the antenna.

REMOTE CONTROL OPERATION

The remote control does not operate the unit.
- Another function is selected on the remote. Press the correct function button.
- The batteries are exhausted. Replace all batteries.
- The remote is not pointed at the remote control sensor on the main unit or there is an obstacle between the remote and the main unit.
- The remote control is too far from the main unit. Move closer.

GENERAL

No audio.
- Make sure the MUTE indicator on the front panel is off.
- Make sure the speakers are turned on.
- Check the connections.
- Check the power cord connection.

No audio from one channel.
- Adjust the balance control.
- Check the speaker wire connection or connecting cable.

CARE AND CLEANING

Use a polishing cloth or other clean, dry cloth to wipe off dust and dirt. When the surface is very dirty, wipe with a soft cloth dipped in a mild soap solution. Do not use furniture wax or cleaners.

Never use alcohol, paint thinner, benzene, or a chemically treated cloth to clean your system. Chemicals may damage the finish on the unit.

When using a damp cloth, make sure you squeeze out as much of the water as possible.

APPENDIX E: FCC INFORMATION

FCC INFORMATION

In accordance with FCC requirements, changes or modifications not expressly approved by Thomson Consumer Electronics could void the user's authority to operate this product.

Important Information Required by Federal Communications Commission Concerning Radio Frequency Interference:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

If this equipment does cause interference to radios or televisions not connected to your system, try to correct the interference with one or more of the following measures:

• Reorient the receiving antenna (that is , the antenna for the radio or television that is, "receiving" the interference).

• Change the position of the unit with respect to the radio or television equipment that is receiving the interference.

• Move the unit away from the equipment that is receiving the interference.

• Plug the unit into a different wall outlet so that the unit and the equipment receiving the interference are on different branch circuits.

If these measures do not eliminate the interference, please consult with your dealer or an experienced radio/television technician for additional suggestions. Also, the Federal Communications Commission has prepared a helpful booklet, "How to Identify and Resolve Radio and TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402. Please specify stock number 004-000-00345-4 when ordering copies.

LIMITED WARRANTY

What your warranty covers:
• Any defect in material or workmanship.

For how long after your purchase:
• One year for labor charges.
• One year for parts.
The warranty period for rental units begins with the first rental or 45 days after shipment to the rental firm, whichever is first.

What we will do:
• Pay any Authorized RCA Audio Servicenter the labor charges to repair your audio/video receiver.
• Provide you new, or at our option, refurbished replacement parts for the Authorized RCA Audio Servicenter to make repairs.

How you get service:
• Take your unit to any Authorized RCA Audio Servicenter. For their names and locations, ask your dealer, look in the Yellow Pages, or call 1-800-336-1900.
• Show the service technician your evidence of purchase date.

What your warranty does not cover:
• Customer instruction. (Your Owner's Manual clearly describes how to install, adjust, and operate your audio/video receiver. Any additional information should be obtained from your Dealer.)
• Installation and related adjustments.
• Signal reception problems caused by your external antenna or cable systems.
• Damage from misuse or neglect.
• Remote control batteries.
• Units that have been modified or incorporated into other products.
• Units purchased or serviced outside the USA.
• Acts of God, such as, but not limited to lightning damage.

Product Registration:
• Please complete and mail the Product Registration Card packed with your unit. It will make it easier to contact you should it ever be necessary. The return of the card is not required for warranty coverage.

How state law relates to this warranty:
• This warranty gives you specific legal rights, and you also may have other rights that vary from state to state.

If you purchased your television outside the U.S.A.:
• This warranty does not apply. See your dealer for details.

APPENDIX G: EQUIPMENT SPECIFICATIONS

EQUIPMENT SPECIFICATIONS

Amplifier Section

      Rated Power Output

Left Main/Center/Right Main (at 8 Ω):	40 watts/40 watts/40 watts 20 Hz to 20 kHz at 0.25% THD
Typical Right/Left Stereo Power Output (at 8 Ω):	50W 1kHz at 0.9% THD
Rear Surround (at 8 Ω):	40 watts/40 watts 20 Hz to 20 kHz 0.25% THD (without Dolby Process)
Signal to Noise Ratio:	75 dBA
Channel Separation:	65 dB @ 1 kHz 45 dB @ 10 kHz
Input Sensitivity/Impedance:	150 mV @ 47k Ω
Muting Attenuation:	65dB
Subwoofer Output:	2.0V+/-0.5V (max volume)

Video Section

Input (Sensitivity/Impedance): VCR 1, VCR 2/LD, SAT	1 Vp-p/75 Ω
Output (Sensitivity/Impedance): VCR 1, Video Monitor	1 Vp-p/75 Ω
Frequency Response for VCR 1, VCR 2/LD, SAT and Video Monitor	5 Hz: -1.5 dB,10 MHz: -3 dB, reference 500 kHz: 0 dB
Signal to Noise Ratio:	45 dB
Crosstalk @ 3.58 MHz:	45 dB

FM Tuner Section

Tuner Frequency Range:	87.5 to 107.9 MHz
Usable Sensitivity:	15 dBf
THD @ 75 kHz Dev Stereo:	0.5%
Signal to Noise @ 65 dBf Stereo:	70 dBA
Stereo Separation:	40 dB @ 1 kHz
Image Rejection:	40 dB @ 97.9 MHz
IF Rejection:	65 dB
AM Suppression @ 65 dBf:	50 dB
Antenna Input:	300 Ω Balance

AM Tuner Section

Frequency Range:	520 to 1720 kHz
20 dB Quieting	800 μV/m @ 1000 kHz
Signal to Noise Ratio:	45 dBA
Image Rejection:	40 dB @ 600 kHz
IF Rejection:	40 dB

Specifications are based on nominal measurements.

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DSS® is a registered trademark of DIRECTV, INC., a unit of Hughes Electronics Corporation.

APPENDIX H: PRESET STATION LIST FORM

Preset Number	Band	Frequency	Notes
1			
2			
3			
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7			
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TV MENU button 20

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VOL up and down buttons 18
VOLUME button 15

W

Wide, Center Mode 14

For your nearest RCA Home Entertainment Dealer or
Authorized Servicenter, all toll-free in the USA.

1-800-336-1900

If your product needs service, please contact your dealer or
the nearest Servicenter from the yellow pages. Please do not
send any products to the Indianapolis address listed in this
manual or on the carton. This will only add delays in service
for your product.